

In the Claims:

1. (Currently Amended) A method of fabricating a semiconductor device, the method comprising:

providing a workpiece;

depositing a porous dielectric material over the workpiece;

forming a pattern in the porous dielectric material, the pattern comprising sidewalls;

depositing a layer of photosensitive material over the porous dielectric material[[,]]

~~wherein the photosensitive material forms a barrier region of photosensitive material within the sidewalls of the pattern in the porous dielectric material, over that covers the sidewalls of the pattern in the porous dielectric material [[,]] such that said photosensitive material soaks a first distance into or both within and over the sidewalls of the pattern in the porous dielectric material;~~
[[and]]

~~developing-providing light having a wavelength selected to develop the photosensitive material material;~~

~~developing and removing portions of the photosensitive material exposed to said light;~~

~~and~~

~~leaving portions of said photosensitive material that soaked into said porous sidewalls unexposed, and undeveloped such that said photosensitive material that soaked in said porous sidewalls is not removed, and forms a barrier region of photosensitive material within the sidewalls.~~

2. (Original) The method according to Claim 1, wherein forming the pattern in the porous dielectric material comprises forming a single or dual damascene pattern.

3. (Original) The method according to Claim 1, wherein depositing the porous dielectric material comprises depositing a low dielectric constant material.
4. (Original) The method according to Claim 3, wherein depositing the low dielectric constant material comprises depositing a material having a dielectric constant of 3.0 or less.
5. (Original) The method according to Claim 3, wherein depositing the low dielectric constant material comprises depositing porous methylsilsesquioxane (MSQ), porous inorganic materials, porous CVD materials, porous organic materials, other non-low-k dielectric materials, or combinations thereof.
6. (Original) The method according to Claim 1, wherein depositing the photosensitive material comprises spinning on a material compatible with the porous dielectric material.
7. (Original) The method according to Claim 6, wherein depositing the porous dielectric material comprises depositing porous methylsilsesquioxane (MSQ), a porous inorganic material, a porous CVD material, a porous organic material, or a non-low-k dielectric material, and depositing the photosensitive material comprises depositing a MSQ material, an inorganic material, a CVD material, an organic material, or a non-low-k dielectric material.
8. (Original) The method according to Claim 1, wherein depositing the photosensitive material comprises depositing photosensitive polyimide, a photosensitive organic material, a photosensitive inorganic material, or benzocyclobutane (BCB).
9. (Original) The method according to Claim 1, wherein the porous dielectric material comprises a plurality of pores, wherein the barrier region comprises photosensitive material soaked into the sidewalls of the porous dielectric material pattern by about one or two pores.

10. (Original) The method according to Claim 1, wherein the barrier region comprises photosensitive material soaked into the sidewalls of the porous dielectric material pattern by about 50 Å or less.
11. (Original) The method according to Claim 1, wherein developing the photosensitive material comprises exposing the workpiece to ultraviolet (UV) light.
12. (Original) The method according to Claim 11, wherein exposing the workpiece to light comprises exposing the workpiece to DUV light in 365 nm, 248 nm, or 193 nm wavelengths.
13. (Original) The method according to Claim 1, further comprising:
depositing a liner over the porous dielectric material and barrier region of photosensitive material; and
depositing a conductive material over the liner to fill the pattern in the porous dielectric material.
14. (Original) The method according to Claim 13, wherein depositing the conductive material comprises depositing copper.
15. (Cancelled)
16. (Original) The method according to Claim 1, further comprising depositing an etch stop layer over the porous dielectric material, before forming the pattern in the porous dielectric material.
17. (Original) The method according to Claim 16, wherein the etch stop layer comprises about 100 to 1000 Å of a silicon carbon based material, a carbo-nitride material, a spin-on cap

material, silicon nitride, silicon oxides, other insulating materials, a metal, or combinations thereof.

18.-34. (Cancelled)

35. (New) The method of Claim 16 whercin said etch stop layer shields a layer of photosensitive material on said sidewalls from said light such that said shielded layer is not developed and is not removed.

36. (New) The method of Claim 16 wherein said etch stop layer shields the photosensitive material that soaked into said process sidewalls from said light such that said shielded layer is not developed and is not removed.